



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2011-1170; Directorate Identifier 2010-NM-264-AD; Amendment 39-17080; AD 2012-12-01]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are superseding an existing airworthiness directive (AD) for all Airbus Model A300 B4-600, B4-600R and A300 F4-600R series airplanes, Model A300 C4-605R Variant F airplanes, and Model A310 series airplanes. That AD currently requires modifying the wiring in the right-hand electronics rack. This new AD requires replacing the cockpit multi-tank indicators (MTI), and for certain airplanes, replacing high-level, low-level, and overflow sensors and their harness connectors, and re-instating the low-level warning indication to the cockpit MTI. This AD was prompted by reports of failures of four fuel level sensor-amplifier and MTI units. This AD also adds Model A310 series airplanes to the applicability. We are issuing this AD to prevent degradation of the electrical insulation sleeves of the low-level indication lamps on the MTI, which could cause a short circuit that might result in high voltage being conveyed to the high and low level sensors in the wing tanks. This condition could cause the level sensor to

heat above acceptable limits, possibly resulting in a fuel tank explosion, and consequent loss of the airplane.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of March 27, 2009 (74 FR 7792, February 20, 2009).

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in

the Federal Register on November 7, 2011 (76 FR 68671), and proposed to supersede AD 2009-02-04, Amendment 39-15794 (74 FR 7792, February 20, 2009). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

One operator experienced failures of four Fuel Level Sensor-Amplifier (FLSA) and Multi Tank Indicators (MTI) units. FLSA and MTI failures have been identified as having been caused by incorrect connector sleeves materials fitted to the MTI units.

Degradation of the electrical insulation sleeves of the Low-level indication lamps on the MTI of the flight deck can cause a short circuit that might result in high voltage being conveyed to the high and low level sensors in the wing tanks. This condition, if not corrected, could cause the level sensor to heat above acceptable limits, possibly resulting in fuel tank explosion, and consequent loss of the aeroplane.

As an interim action, EASA AD 2008-0055 [which corresponds to FAA AD 2009-02-04, Amendment 39-15794 (74 FR 7792, February 20, 2009)], was issued requiring the accomplishment of wiring modifications to protect the FLSA and the Flight Warning Computers from 115V [volt] AC [alternating current] and 28V DC [direct current] short circuits within the cockpit MTI.

EASA AD 2009-0144, which required the replacement of the affected sensors and their harness connectors with modified units in accordance with the instructions of Airbus Service Bulletin (SB) A300-28-6095 at original issue or SB A300-28-9013 at original issue, as applicable, was further on cancelled because the installation of the new inner tank fused low-level sensors was not possible, due to interference between some sensors and a fuel pipe at connector level.

Airbus SB A300-28-6095 and SB A300-28-9013 have been revised to clear this interference. The replacement of the affected sensors and their harness connectors according to the instructions of these SBs is now possible.

This [EASA] AD supersedes [EASA] AD 2008-0055 and

introduces the following actions:

- expanding of the applicability to A310 aeroplanes; and
- replacement of the cockpit MTI with a MTI with silicone sleeves and to reinstate the low level warning indication to the cockpit MTI; and
- replacement of the affected sensors and their harness connectors by fused level sensor units for A300-600 and A300-600ST aeroplanes.

You may obtain further information by examining the MCAI in the AD docket.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We have considered the comments received.

### **Requests for Extension of Compliance Time**

UPS requested that we extend the compliance time specified in paragraphs (h), (i), and (j) in the NPRM (76 FR 68671, November 7, 2011) to 60 months. UPS explained that the requested extended compliance time is to reduce the potential for special maintenance visits of its airplanes, and that a compliance period of less than 60 months will cause undue hardship on UPS and its operation, and result in significant negative economic impact. UPS reasoned that it has an existing tank entry program that is completed only during airplane major maintenance visits at a 5-year time interval, and that using the existing interval will reduce the costs to open, purge, close, and check out the tanks. UPS explained further, that materials will take a minimum of 6 months to receive, and due to the extensive time waiting for parts, this will force even more airplanes into a special visit program in a much shorter period of time than what the NPRM is proposing.

UPS expressed that it agrees with the FAA when the premise for establishing a timeline for completion of an SFAR (Special Federal Aviation Regulation) 88 project is based on a level of safety as determined by the NPRM (76 FR 68671, November 7, 2011) and that it believes there is a timeframe precedence that has previously been set by the FAA for a project of this type. UPS explained that the FAA released an earlier AD, which corrected similar actions to the NPRM (76 FR 68671, November 7, 2011), and that the earlier AD had a 5-year compliance requirement. UPS believes that the same level of safety is achieved with a 5-year compliance on the Model A300 airplanes fleet.

FedEx requested that we extend the compliance time in the NPRM (76 FR 68671, November 7, 2011) to 30 months, to allow for the accomplishment of the work to be performed at a scheduled heavy maintenance event. FedEx explained that it accomplishes a heavy maintenance check on its Model A300-600 and A310 airplanes every 30 months. FedEx reasoned that it would be 22 hours per airplane to accomplish the requirements of the service information and that it is a significant economic and operational hardship for it to “special visit” airplanes to accomplish fuel tank entry.

We do not agree to extend the compliance time in this final rule. In developing an appropriate compliance time for this action, we considered the urgency associated with the subject unsafe condition, the availability of required parts, and the practical aspect of accomplishing the required modification within a period of time that corresponds to the normal scheduled maintenance for most affected operators. Under the provisions of paragraph (m) of the final rule, we will consider requests for approval of an extension of the compliance time if sufficient data are submitted to substantiate that the new

compliance time would provide an acceptable level of safety. We have not changed the AD in this regard.

### **Requests for Revision to Costs of Compliance**

UPS requested that we revise the Costs of Compliance section in the NPRM (76 FR 68671, November 7, 2011). UPS explained that it has determined that the required hours to complete the NPRM are greater than 150 hours and that the material kits that are required by Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010, are approximately \$40,000 each, which is a total of \$52,750 per airplane. UPS reasoned that the completion of the modification on the 53 UPS Model A300 airplanes will be approximately \$2,795,750, which is a significant negative economic impact on UPS. UPS expressed that the proposed cost in the NPRM is only 7.5 percent of the actual cost that UPS will incur and that the actual costs will be greater than 13 times the cost estimates proposed in the NPRM.

FedEx requested that we acknowledge that there is an additional material cost and that our Costs of Compliance section in the NPRM (76 FR 68671, November 7, 2011) is underestimated in terms of financial impact to the operator. FedEx reasoned that the estimated parts cost for accomplishment of Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010, only includes the Airbus manufactured hardware kit (P/N 286095B01R01). FedEx explained that in order to complete the modification, a separate Inter technique kit that includes the actual sensors and harness connectors must be procured, and that Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010, provides no warranty information

or pricing for the additional required kit. FedEx expressed that it is in the process of obtaining price information for the additional required Intertechnique kits and will provide the data when it becomes available.

We agree to revise the Costs of Compliance section in this final rule for the reasons stated by the commenters. We have revised the Costs of Compliance section of the final rule to include the average costs of parts from Intertechnique.

### **Revised Paragraph Header and Wording**

We have revised the heading for and the wording in paragraph (k) of this AD and the wording of paragraph (g) of this AD; these changes have not affected the intent of those paragraphs.

### **Conclusion**

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously—except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 68671, November 7, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 68671, November 7, 2011).

### **Costs of Compliance**

We estimate that this AD will affect about 210 products of U.S. registry.

The actions that are required by AD 2009-02-04, Amendment 39-15794

(74 FR 7792, February 20, 2009), and retained in this AD take about 5 work-hours per product, at an average labor rate of \$85 per work-hour. Required parts cost about \$0 per product. Based on these figures, the estimated cost of the currently required actions is \$425 per product.

We estimate that it will take about 44 work-hours per product to comply with the new basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$39,000 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$8,975,400, or \$42,740 per product.

#### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority



because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (76 FR 68671, November 7, 2011), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800)

647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2009-02-04, Amendment 39-15794 (74 FR 7792, February 20, 2009), and adding the following new AD:

**2012-12-01 Airbus:** Amendment 39-17080. Docket No. FAA-2011-1170; Directorate Identifier 2010-NM-264-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD supersedes AD 2009-02-04, Amendment 39-15794 (74 FR 7792, February 20, 2009).

**(c) Applicability**

This AD applies to Airbus Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes, and Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes; certificated in any category; all certified models, all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 28: Fuel.

**(e) Reason**

This AD was prompted by reports of failures of four fuel level sensor-amplifier and multi-tank indicator (MTI) units. We are issuing this AD to prevent degradation of the electrical insulation sleeves of the low-level indication lamps on the MTI, which could cause a short circuit that might result in high voltage being conveyed to the high and low level sensors in the wing tanks. This condition could cause the level sensor to heat above acceptable limits, possibly resulting in a fuel tank explosion, and consequent loss of the airplane.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Retained Actions and Compliance Times**

(1) This paragraph restates the actions and compliance times required by paragraph (f) of AD 2009-02-04, Amendment 39-15794 (74 FR 7792, February 20, 2009), with no changes. For Model A300-600 airplanes: Unless already done, within 3

months after March 27, 2009 (the effective date of AD 2009-02-04), modify the wiring in the right-hand electronics rack in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28A6096, Revision 02, dated July 4, 2008. Doing the required actions in paragraph (h) or (i) of this AD, as applicable, terminates the actions required by this paragraph.

(2) This paragraph provides credit for the modification required by paragraph (g)(1) of this AD, if the modification was performed before March 27, 2009 (the effective date of AD 2009-02-04) using Airbus Mandatory Service Bulletin A300-28A6096, dated October 19, 2007; or Revision 01, dated April 16, 2008.

**(h) New Replacement and Re-Instatement for Certain Model A300-600 Series Airplanes, with New Service Information**

For Model A300-600 series airplanes on which Airbus modification 06213 has been embodied in production: Within 24 months after the effective date of this AD, do the actions required by paragraphs (h)(1), (h)(2), and (h)(3) of this AD. Doing the actions in this paragraph terminates the requirements of paragraph (g)(1) of this AD.

(1) Replace the cockpit MTI, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6101, dated June 4, 2008.

(2) Before further flight after doing the replacement specified in paragraph (h)(1) of this AD: Replace the high-level, low-level, and overflow sensors and their harness connectors, with fused sensors and new harness connectors, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010.

(3) Before further flight after doing the replacement specified in paragraph (h)(2)

of this AD: Re-instate the low-level warning indication to the cockpit MTI, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6103, Revision 01, dated May 18, 2010.

**(i) New Replacement and Re-Instatement for Certain Other Model A300-600 Series Airplanes**

For Model A300-600 series airplanes on which Airbus modification 06213 has not been embodied in production: Within 24 months after the effective date of this AD, do the actions required by paragraphs (i)(1), (i)(2), and (i)(3) of this AD. Doing the actions in this paragraph terminates the requirements of paragraph (g)(1) of this AD.

(1) Replace the cockpit MTI, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6101, dated June 4, 2008.

(2) Before further flight after doing the replacement specified in paragraph (i)(1) of this AD: Re-instate the low-level warning indication to the cockpit MTI, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6103, Revision 01, dated May 18, 2010.

(3) Before further flight after doing the action specified in paragraph (i)(2) of this AD: Replace the high-level, low-level, and overflow sensors and their harness connectors, with fused sensors and new harness connectors, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010.

**(j) New Replacement for Model A310 Series Airplanes**

For Model A310 series airplanes: Within 24 months after the effective date of this AD, replace the cockpit MTI, in accordance with the Accomplishment Instructions of

Airbus Mandatory Service Bulletin A310-28-2167, dated June 4, 2008.

**(k) Credit for Previous Actions**

This paragraph provides credit for the actions specified in paragraphs (h)(3) and (i)(2) of this AD, if those actions were performed before the effective date of this AD using Airbus Mandatory Service Bulletin A300-28-6103, dated May 20, 2009.

**(l) Parts Installation**

As of the effective date of this AD, no person may install, on any airplane, any MTI in the cockpit location, unless it has been modified in accordance with the applicable service information listed in paragraphs (l)(1), (l)(2), (l)(3), (l)(4), (l)(5), and (l)(6) of this AD.

(1) Airbus Mandatory Service Bulletin A300-28-6101, dated June 4, 2008.

(2) Airbus Mandatory Service Bulletin A310-28-2167, dated June 4, 2008.

(3) GE Service Bulletin 1404KID-28-466, Revision 1, dated July 15, 2008.

(4) GE Service Bulletin 1406KID-28-467, Revision 1, dated July 15, 2008.

(5) GE Service Bulletin 1410KID-28-468, Revision 1, dated July 15, 2008.

(6) GE Service Bulletin 1420KID-28-469, Revision 1, dated July 23, 2008.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Information may be e-mailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(n) Related Information**

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0175, dated August 18, 2010, and the service information identified in paragraphs (n)(1), (n)(2), (n)(3), (n)(4), (n)(5), (n)(6), (n)(7), (n)(8), and (n)(9) of this AD, for related information.

(1) Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010.

(2) Airbus Mandatory Service Bulletin A300-28-6101, dated June 4, 2008.

(3) Airbus Mandatory Service Bulletin A300-28-6103, Revision 01, dated

May 18, 2010.

(4) Airbus Mandatory Service Bulletin A300-28A6096, Revision 02, dated July 4, 2008.

(5) Airbus Mandatory Service Bulletin A310-28-2167, dated June 4, 2008.

(6) GE Service Bulletin 1404KID-28-466, Revision 1, dated July 15, 2008.

(7) GE Service Bulletin 1406KID-28-467, Revision 1, dated July 15, 2008.

(8) GE Service Bulletin 1410KID-28-468, Revision 1, dated July 15, 2008.

(9) GE Service Bulletin 1420KID-28-469, Revision 1, dated July 23, 2008.

**(o) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51 on the date specified.

(2) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER PUBLICATION]:

(i) Airbus Mandatory Service Bulletin A300-28-6095, Revision 01, dated February 2, 2010.

(ii) Airbus Mandatory Service Bulletin A300-28-6101, dated June 4, 2008.



(iii) Airbus Mandatory Service Bulletin A300-28-6103, Revision 01, dated May 18, 2010.

(iv) Airbus Mandatory Service Bulletin A310-28-2167, dated June 4, 2008.

(v) GE Service Bulletin 1404KID-28-466, Revision 1, dated July 15, 2008.

(vi) GE Service Bulletin 1406KID-28-467, Revision 1, dated July 15, 2008.

(vii) GE Service Bulletin 1410KID-28-468, Revision 1, dated July 15, 2008.

(viii) GE Service Bulletin 1420KID-28-469, Revision 1, dated July 23, 2008.

(3) The following service information was approved for IBR on March 27, 2009 (74 FR 7792, February 20, 2009):

(i) Airbus Mandatory Service Bulletin A300-28A6096, Revision 02, dated July 4, 2008.

(4) For Airbus service information identified in this AD, contact Airbus SAS – EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>. For GE service information identified in this AD, contact GE Aviation, Customer Support Center, 1 Neumann Way, Cincinnati, Ohio 45215; telephone 513-552-3272; e-mail [cs.techpubs@ge.com](mailto:cs.techpubs@ge.com); Internet <http://www.geaviation.com>.

(5) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(6) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on May 31, 2012.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-14048 Filed 06/15/2012 at 8:45 am; Publication Date: 06/18/2012]